CLAIMS

1. An oil injecting apparatus comprising:

a bearing seating (30) having a bearing seating surface formed on a front surface thereof and an oil injection through-passage (31) extending through the bearing stand (30) from the front surface to a back surface thereof;

a cover member (32) having an injection tube pass-through hole (33) and a suction/exhaust through-passage (34);

an oil container (11) storing oil to a predetermined level and sealed with the cover member (32);

a suction/exhaust tube (18) having one end connected to the suction/exhaust through-passage (34) and the other end connected to a suction/exhaust device;

an injection tube (36) passing through the injection tube pass-through hole (33) of the cover member (32) such that the injection tube (36) is capable of vertical movement while maintaining airtightness, the injection tube (36) having a lower end projecting into the oil container (11) and an upper end secured to a lower end of the oil injection through-passage (31) of the bearing seating (30);

a distance changing device which changes a distance between the bearing seating (30) and the oil container (11) from an exhaust position with the lower end of the injection tube (36) positioned

away from an oil level into an injection position with the lower end of the injection tube (36) submerged into oil; and

bearing fixing means (26) abutting a one-sided-bag-shaped fluid dynamic pressure bearing (10) into which oil is to be injected, for fixing airtight the one-sided-bag-shaped fluid dynamic pressure bearing (10) onto the bearing seating (30),

wherein the one-sided-bag-shaped fluid dynamic pressure bearing (10) is fixed onto the cover member (32) by the bearing fixing means (26), an inside of the one-sided-bag-shaped fluid dynamic pressure bearing (10) is brought into a vacuum in the exhaust position by the suction/exhaust device, and then in the injection position, the suction/exhaust tube (18) is released to an atmosphere to inject oil in the oil container (11) into the one-sided-bag-shaped fluid dynamic pressure bearing (10).

2. An oil injecting apparatus according to Claim 1, characterized in that the distance changing device vertically moves the bearing seating (30).

3. An oil injecting apparatus according to Claim 1, characterized in that the distance changing device vertically moves the oil container (11).

4. An oil injecting apparatus according to any one of Claims 1,

2, and 3, characterized in that the distance changing device includes a stepping motor.

5. An oil injecting apparatus according to any one of Claims 1, 2, and 3, characterized in that the distance changing device includes a hydraulic motor.